Amendments to the Drawings

Please substitute the Replacement Drawing Sheet included herewith for Original Drawing Sheet 3/3 (Figs. 5 and 6). By this amendment, both Figs. 5 and 6 are amended, as required by the Examiner, to provide a different reference numeral for the diffuser element (now element 127 or 227) and the O-ring (element 126 or 226). Additionally, the element 124 referred to in the specification has been added to Fig. 5. Entry of the Replacement Sheet is respectfully requested.

REMARKS

This Amendment responds to the Office Action dated June 10, 2005. Applicant is appreciative of Examiner's comments regarding the allowability of the claims 6, 7, 11, 16-21, and 28-35 based upon the inclusion of the subject matter recited in any associated base claim and any intervening claims. As such, independent claim 8 has been amended to include the subject matter of dependent claims 10 and 11 and independent claim 24 has been added to include the subject matter of original dependent claim 25-28.. Also, independent claim 1 has been amended to include the subject matter of claims 2, 3, and 5 and independent claim 12 has been amended to include the subject matter of claim 13. Claims 2-5, 9-11, 13 and 25-28 have been canceled. The cancellation of these claims should in no way be construed as acquiescence to any of the rejections stated. These claims were canceled solely to expedite the prosecution of the present application. Applicant does not intend to abandon the scope of the non-elected claims as originally filed or as withdrawn by the Examiner in the previous office action, but may pursue the remaining claims, either by petition for further review or in a divisional application. Additionally, new claim 36 has been added. New claim 36 consists of the subject matter in original claims 1-4. Applicants submits that no new matter has been added and, based upon the following reasons, the application should be in condition for allowance. Accordingly, claims 1, 6, 7, 8, 12, 14-24, and 29-36 are presently under consideration in this application.

DRAWINGS OBJECTIONS

In accordance 37 CFR 1.121(d), Applicant has submitted a Replacement Sheet for Figure(s) 5 and 6 providing for different reference numerals for the diffuser element and the O-ring. Applicant respectfully suggests that the drawings are now in proper form. Additionally, Applicant has amended the specification to reflect the change in the reference numeral for the diffuser element.

35 U.S.C. §§ 102(b) REJECTIONS

Claims 1-5, 8-10, 12-15, and 22-27 stand rejected under 35 U.S.C. §102(b) as being anticipated by Foster (US Patent Number 3,026,800). Applicant respectfully traverses these rejections. Applicant submits that newly amended claims 1, 8, 12, and 24 are now distinguished from the cited prior art and in allowable form. In particular, Applicant submits that the teachings of Foster are limited to a pressure relief valve that reacts to only two forces: the spring force created by the helical spring (13) and a fluid pressure force created by the fluid flowing through the main chamber. There is no supplemental or third force present as recited by each of these claims. Applicant submits that one skilled in the art appreciates that the teachings of Foster are directed towards a momentary relief of pressure within the main chamber (25). As such, there is only a pressure balance between the aforementioned two forces. When the fluid pressure generates a force sufficient to overcome the control valve (15) spring force, the fluid pressure in annular slot (20) rise to levels required to compress the helical spring (13) subsequently moving the main valve (9) to reveal the external port (12) to the main chamber (25) via internal port (14) to vent pressure within the main chamber (25). The momentary decrease in fluid pressure cycles the control valve (15) and the main valve (9) returns to a normally closed position to seal the main chamber from both the external port (12) and control valve (15). Most

significantly, one skilled in the art appreciates that nowhere is it taught within Foster that a third force acts upon the main valve (9) to cycle or operate the device. Quite simply, the control valve (15) in fluid communication with the main valve(9) reacts to a single fluid pressure – and a single force– supplied through the main chamber(25) to activate the control valve (15) to relieve fluid pressure.

Quite the opposite, Applicant's invention, as now claimed, responds to a third force generated from a supplemental fluid source to create a force balance between three sources: a spring, a direct fluid pressure source, and an additional fluid source controlled by an independent control valve that is used in aggregate with the spring to moderate position of the plug. Applicant respectfully submits that one skilled in the art appreciates that the combination of these three forces is not expressly nor inherently taught in the reference cited.

Newly amended claim 1 now recites "[a] variable vent valve diffuser comprising... a conduit having at least one aperture [and] an adjustable plug ...the [adjustable] plug being slidably adjusted in response to first and second opposing forces acting on the plug, the first force acting on a first end of the plug and being generated by fluid pressure within the conduit, the second force acting on a second end of the plug and being generated by a spring ... and a control valve in fluid communication with the conduit, *the control valve adapted to monitor fluid pressure within the conduit, and generate a third force adapted to act on the plug.*" Thus, the control valve (44) provides a third force used in aggregate with the spring force to moderate or adjust the position of the plug (12). One skilled in the art appreciates the third force is related to or is derived from the fluid pressure in the conduit (14) and is independently controlled by the control valve (44). Unlike, the Foster reference, the third force acts in aggregate with the spring force and is not equal to the primary fluid force generated by the fluid flowing against the plug (12).

One appreciates that this is because the control valve (44) inherently induces a controlled pressure drop, and therefore a force reduction, that is independent from the main pressure source acting upon the plug. There is simply no teaching nor suggestion within Foster regarding Applicant's invention.

Under Section 2131, the MPEP directly states: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). Applicants' respectfully submit that claim 1, as now claimed, is neither anticipated nor obvious in view of the Foster and the rejections of claim 1 and its associated dependent claims 6-7 should be withdrawn.

Further, Applicant is appreciative of the acknowledgement that the subject matter of claim 11 is allowable if rewritten in independent form when including the limitations of the base claim and any intervening claims. As such, Applicant has amended independent claim 8 to include the subject matter of claim 10, to better define Applicant's invention, and claim 11. Applicant respectfully submits that original claim 11 was presented as being dependent upon claim 7 in error. The claim numbering error identified within the present office action propagated into numerous dependent claims. Applicant submits that the remaining claim numbering errors have been corrected via amendment or are inherent in the cancellation of claims within this response. Thus, claim 8 should now be in allowable form.

Additionally, Applicant has amended independent claim 12 to include the subject matter of dependent claim 13. In particular, claim 12 has been amended to include *a supplemental source of pressurized fluid in communication with the retainer guide and acting on the plug to provide a secondary force to supplement the spring force to move the plug.* That is, one of ordinary skill appreciates that the

fluid source emanating from control valve (44) and safety valve (46) in fluid communication with the valve plug(12) is independently controlled from the primary fluid source and is supplemental to the spring force to create a force balance across the valve plug (12) to control the position of the valve plug (12). For the reasons previously stated above, the teachings of Foster do not expressly nor inherently suggest the existence of a secondary force in aggregation with the spring force to overcome the primary fluid force as Applicant now claims. Therefore, Applicant respectfully submits that claim 12, and therefore the associated dependent claims 14-23, are in condition for allowance.

Applicant is appreciative of the acknowledgement that the subject matter of claims 28-35 is allowable if rewritten in independent form when including the limitations of the base claim and any intervening claims. As such, Applicant has amended independent claim 24 with the subject matter of dependent claims 24-28. Thus, claims 24 and 29- 35 should now be in allowable form.

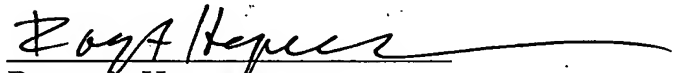
Lastly, new claim 36 consists of the subject matter found in original claims 1-4. Applicants respectfully submits that new claim 36 recites subject matter not disclosed in or inherent in Foster. Namely, one skilled in the art understands that the subject matter of original dependent claim 4 (i.e., *a preload assembly adapted to impart a compressive force on the spring thereby adjusting the preload in the spring*) is clearly made in reference to the assembly depicted in Figure 6 of Applicant's pending application. That is, the preload assembly adjusts the spring force on the plug (212) that directly opposes the primary fluid force in the diffuser. On the other hand, the only adjustment taught within Foster relates to adjustments of the control valve (15) set point. Thus, new claim 36 cannot be anticipated by or obvious in view of Foster and should therefore be allowed.

CONCLUSION

For the reasons stated above, Applicant submits that the drawings and claims are in proper form and clearly define patentable subject matter with respect to the prior art. This paper is timely filed as it is accompanied by a petition for a one-month extension of time and the requisite fee therefore. Additionally, by this amendment, one additional independent claim has been added. As a result, Applicant submits herewith the fee for the consideration of one additionally independent claim. However, if there are any additional fees or refunds required, the Commissioner is directed to charge or debit Deposit Account No. 13-2855 of Marshall, Gerstein & Borun LLP. A copy of this paper is enclosed herewith.

Respectfully submitted,

Date: October 10, 2005



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